

1 What is claimed is:

2 1. A method for localization of a Java application, comprising:

3 locating a plurality of localizable variables of a class using a custom class loader;

4 finding a corresponding resource file for a current language for each localizable

5 variable;

6 calculating a key for each localizable variable;

7 finding a localized string in the resource file corresponding to each key; and

8 assigning the localized string to the corresponding localizable variable of the

9 class,

10 wherein the custom class loader provides localization of the class during class  
11 loading.

12 2. The method of claim 1, further comprising:

13 creating an instance of the custom class loader using a launcher;

14 requesting an application startup class from the custom class loader;

15 returning a localized version of the application startup class; and

16 running the application startup class using a reflection application programming

17 interface (API).

18 3. The method of claim 1, further comprising loading resource files of the class from  
19 a storage device using the custom class loader.

20 4. The method of claim 1, further comprising:

21 loading the class from a bootstrap class loader; and

22 passing a localized class to a Java virtual machine.

23 5. An apparatus for localization of a Java application, comprising:

24 a custom class loader capable of inspecting codes of the application, and

25 converting strings of a class to localized strings during class loading, thereby providing  
26 localization of the class during class loading;

27 a reflection application programming interface (API) capable of obtaining  
28 descriptors of variables of the class; and

29 a launcher capable of creating an instance of the custom class loader and running  
30 an application startup class using the reflection API.

31 6. The apparatus of claim 5, wherein the custom class loader is a subclass of a Java  
32 language class loader.

33 7. The apparatus of claim 5, wherein the custom class loader locates the plurality of  
34 localizable variables of the class.

8. The apparatus of claim 7, wherein the custom class loader finds a corresponding resource file for a current language for each localizable variable.
9. The apparatus of claim 8, wherein the custom class loader calculates a key for each localizable variable.
10. The apparatus of claim 9, wherein the custom class loader finds a localized string in the resource file corresponding to each key.
11. The apparatus of claim 10, wherein the custom class loader assigns the localized string to the corresponding localizable variable of the class.
12. The apparatus of claim 5, wherein the custom class loader loads the class from a bootstrap class loader.
13. The apparatus of claim 5, wherein the custom class loader passes a localized class to a Java virtual machine.
14. The apparatus of claim 5, wherein the launcher creates an instance of the custom class loader.
15. The apparatus of claim 5, wherein the launcher requests an application startup class from the custom class loader, wherein the custom class loader returns a localized version of the application startup class.
16. The apparatus of claim 15, wherein the custom class loader runs the application startup class using a reflection application programming interface (API).
17. A computer readable medium providing instructions for localization of a Java application, the instructions comprising:
- locating a plurality of localizable variables of a class using a custom class loader;
  - finding a corresponding resource file for a current language for each localizable variable;
  - calculating a key for each localizable variable;
  - finding a localized string in the resource file corresponding to each key; and
  - assigning the localized string to the corresponding localizable variable of the class,
- wherein the custom class loader provides localization of the class during class loading.
18. The computer readable medium of claim 17, further comprising instructions for:
- creating an instance of the custom class loader using a launcher;
  - requesting an application startup class from the custom class loader;
  - returning a localized version of the application startup class; and

- 1 running the application startup class using a reflection application programming  
2 interface (API).
- 3 19. The computer readable medium of claim 17, further comprising instructions for  
4 loading resource files of the class from a storage device using the custom class loader.
- 5 20. The computer readable medium of claim 17, further comprising instructions for:  
6 loading the class from a bootstrap class loader; and  
7 passing a localized class to a Java virtual machine.

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